

Claims

What is claimed is:

1. A mechanism comprising:
a solenoid having a plunger adapted for movement in response to a signal,
a latch rod connected to the plunger for movement therewith;
a trip rod; and
means for urging the trip rod in a direction so that the latch rod engages the trip rod in a manner to prevent the movement of the trip rod in the direction, so that energization of the solenoid causes movement of the plunger, and therefore the latch rod, to release the engagement with the trip rod and permit the trip rod to move in the direction.
2. The mechanism of claim 1 further comprising a lever adapted to rotate in response to the movement of the trip rod.
3. The mechanism of claim 2 wherein the lever has a leg that is engaged by an actuation rod, so that movement of the trip rod causes corresponding rotation of the lever and release of the actuation rod to permit the actuation rod to control an external member.
4. The mechanism of claim 3 wherein the actuation rod extends in a notch in the leg of the lever.
5. The mechanism of claim 3 wherein the external member is a shut off valve and wherein release of the actuation rod permits it to close the shut off valve.
6. The mechanism of claim 1 wherein the trip rod has a stepped-down portion that receives an end of the latch rod.

7. The mechanism of claim 6 wherein the latch rod has an enlarged head on the end of the latch rod that extends in the stepped-down portion of the trip rod.
8. The mechanism of claim 1 further comprising means for moving the latch rod in a direction opposite the direction of movement of the plunger so that the mechanism can be reset.
9. The mechanism of claim 8 wherein the mechanism is reset by manually moving the trip rod in a direction opposite the direction so that the latch rod can engage the trip rod.
10. A method of shutting off a steam turbine from a remote location, the method comprising;
 - connecting a trip rod to a shut off valve of the turbine;
 - urging the trip rod for movement in a direction so that it closes the shut off valve;
 - urging a latch rod into engagement of the trip rod to prevent the movement of the trip rod;
 - connecting a latch rod to the plunger of a solenoid; and
 - energizing the solenoid so that movement of the plunger causes the latch rod to move out of engagement with the trip rod so that the trip rod moves in the direction to close the shut off valve.
11. The mechanism of claim 10 further comprising resetting the trip rod by manually moving it in a direction opposite the direction of movement of the trip rod so that the latch rod can engage the trip rod.
12. The method of claim 10 further comprising urging the latch rod in a direction opposite the direction of movement of the plunger so that the latch rod can engage the trip rod.